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CATALOGUE OF THE TAXA OF THE SUBFAMILY PROSERPININAE (HELICINIDAE: PROSOBRANCHIA)

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This catalogue was compiled during the preparation of our systematic monograph of the proserpinine snails in the Greater Antilles (see preceding paper, Boss and Jacobson, 1975, Occ. Papers Moll., no. 51). We brought together so much information on the nominal species and genera in the Proserpininae as well as spurious species at one time referable to the group that we deemed it worthwhile to publish these data which include: 1) generic, subgeneric and specific nomina as originally introduced; 2) the original citation; 3) the type-locality; 4) and the location of the type-specimens, if known. Notes on present systematic placements and synonymies are provided.

ABBREVIATIONS

ANSP — Academy of Natural Sciences of Philadelphia
MCZ — Museum of Comparative Zoology
BMNH — British Museum of Natural History
USNM — United States National Museum
CAS — California Academy of Sciences, San Francisco
UF — University of Florida
MP — Museo Poey, Havana, Cuba

Of the nomina introduced by the various authors for the Proserpininae we conclude on the basis of personal observations and the consultation of the literature, that there are two generic level taxa, *Ceres* and *Proserpina s. l.*, the latter having 5 subgeneric units: *Proserpina s.s.*, *Despoenella*, *Staffola*, *Linidiella* and *Proserpinella*, and 19 valid species. A further examination of some of the nominal species, specimens of which we have difficulty in procuring, especially those from South America, may lead to still further reductions.

Ceres was described by Gray (1856: 100) for its uniquely keeled, rather large helicoid shell, the spire of which is sculptured and the aperture of which is provided with 6 lamellae or denticles. Kobelt (1879: 203) subsequently designated *Caracolla eolina* as the type-species which was originally thought to have helicoid affinities. Presently recognized as a distinctive genus, *Ceres* includes three species.

<i>eolina</i> Duclos	Mexico
<i>salleana</i> Gray	Mexico
<i>nelsoni</i> Dall	Mexico

Proserpina s.s. was introduced by Sowerby (1839: 124) with *Proserpina nitida* Sowerby as type-species by monotypy. *Procerpena* Gray and *Despoena* Newton are synonyms of *Proserpina s.s.*

With the exception of *Ceres*, all other superspecific taxa are considered as subgenera of *Proserpina s. l.*, namely *Proserpina s.s.*, *Despoenella*, *Staffola*, *Linidiella*, and *Proserpinella*.

Proserpina s.s. is geographically restricted to Jamaica and consists of two species, both of which have parietal, columellar and palatal lamellae.

<i>nitida</i> Sowerby	Jamaica
<i>linguifera</i> Jonas	Jamaica

Baker (1923: 85) established *Despoenella*, herein considered as a subgenus of *Proserpina s. l.*, with *Odontostoma depressa* Orbigny as type-species. *Odontostoma* Orbigny, *Odostoma* Orbigny, and *Despaenella* 'Baker' Neave are synonymous.

The species of *Despoenella* have parietal and columellar but not palatal lamellae and are all found in the Greater Antilles.

<i>bidentata</i> C. B. Adams	Jamaica
<i>pisum</i> C. B. Adams	Jamaica
<i>depressa</i> Orbigny	Cuba
<i>globulosa</i> Orbigny	Cuba
<i>marcanoï</i> Clench	Hispaniola

Cyane H. Adams 1870 from eastern Peru was introduced for a species with "the base of the columella is truncate instead of being furnished with a spiral plate . . . and both palatal and parietal lamellae are wanting." In establishing *Staffola*, Dall (1905) felt that "this appearance of truncation is due to the fact that there is only a narrow notch between the columellar lamella and the basal margin." Since *Cyane* is preoccupied by Felder 1861 (Lepidoptera) the name *Staffola* with 4 South American species takes its place. Although Keen (1960) considered *Staffola* to be a subgenus of *Linidiella* and it may well be that *Staffola* could be completely synonymized, it is herein treated as a subgenus of *Proserpina* s. l. with 4 South American species.

<i>blandiana</i> H. Adams	Peru
<i>cousini</i> Jousseume	Ecuador
<i>orbignyi</i> Ancey	Bolivia
<i>derbyi</i> Dall	Bahia, Brazil

Linidiella was introduced by Jousseume (1889:256) for a species of *Proserpina* in which only a single fine columellar tooth is present. *P. swifti* Bland was designated as type-species for this group by Baker (1923: 84). We accord it subgeneric rank and include three species. *Chersodespoena* Sykes 1900 is synonymous.

<i>swifti</i> Bland	Venezuela
<i>cinnamomea</i> Sykes	Ecuador
<i>sulfureus</i> Thompson	Mexico

Proserpinella was introduced by Bland (1865:157) with *P. berendti* as type-species by monotypy for small, fragile shells with only a single parietal apertural tooth from

Mexico. Two species are currently referable to this taxon which is herein assigned subgeneric rank.

berendti Bland

Mexico

hannae Dall

Tres Mariás Ids., Mexico

SPURIOUS TAXA

The species *Helix arnoudii* Michaud from the Paleocene near Reims, France, once thought to be referable to *Ceres*, was rejected as such by Sandberger (1871: 149) and placed in the monotypic *Dimorphoptychia* in the Endodontidae near *Sesara infrendens* Gould. Wenz (1938: 435), considering *arnoudii* close to the Vianinae erected for it the subfamily Dimorphoptychiinae within the Helicinidae, where, under the corrected name Dimorphoptychinae it was retained by Keen (1960: 286). If the species is indeed a fossil helicinid, it seems wisest, for the reasons given by Sandberger, to separate it from the neotropical taxa although its shape and apertural lamellae suggest a relationship with the subfamily Proserpininae.

The following taxa, noted with an asterisk (*) in the subsequent list, are referable to groups other than the Proserpininae: *arnoudii*, *arnouldi*, *Dimorphoptychia*, *discoidea*, *hyalina*, *lyelli*, *margarita*, *opalina*, and *woodwardi*.

allognota Jonas, **Proserpina**. 1846. Zeitschrift für Malakozoologie 3: 12, new name for *H. linguifera* Jonas 1839.

***arnoudii** Michaud, **Helix**. 1837. Guerin's Magazine de Zoologie 6: Cl. 5, p. 3, pl. 81, figs. 7-9 (fossile du calcaire siliceux du gypse de la montagne de Reims [Paleozän, Thanet, Calcaire de Rilly, Rilly-la-Montagne bei Reims, Dép. Marne, teste Wenz 1938: 435]; holotype, ? Lyon Mus., teste Dance 1966: 294).

***arnouldi** 'Michaud' Boissy, **Helix**. 1848. Mem. Soc. Geol. de France, ser. 2, 3 (1): 272, pl. 5, fig. 12 a-c, error for *arnoudii*.

berendti Bland, **Proserpinella**. 1865. Ann. Lyc. Nat. Hist. New York 8: 157, fig. 2 (Mirador, Atlantic slope, 3000 to 4000 ft. elevation, Mexico; holotype, ?)

- bidentata** C. B. Adams, *Proserpina*. 1850. Contributions to Conchology No. 5: 81 (Jamaica; holotype, MCZ 186126, figured by Jacobson and Boss 1973: 328, pl. 85, figs. 1-2).
- blandiana** H. Adams, *Cyane*. 1870. Proc. Zool. Soc. London, pt. 2, p. 376, pl. 27, figs. 2-2a (Eastern Peru; holotype, BMNH).
- Ceres** Gray. 1856. Proc. Zool. Soc. London, pt. 24, p. 100 (type-species, *Caracolla eolina* Duclos 1834, by subsequent designation, Kobelt 1879: 203).
- Chersodespoena** Sykes. 1900. Proc. Mal. Soc. London 4: 136 (type-species, *Despoena (Chersodespoena) cinnamomea* Sykes, 1900, by original designation). NOTE: Synonym of *Linidiella* Jousseaume, 1889.
- cinnamomea** Sykes, *Despoena (Chersodespoena)*. 1900. Proc. Mal. Soc. London 4: 136, 3 figs. (between Ayabamba and Santa Rosa, Ecuador; holotype, BMNH).
- cousini** Jousseaume, *Proserpinella*. 1887. Bull. Soc. Zool. France 12: 181, pl. 3, figs. 15-16 (République de l'Equateur; holotype, ?).
- Cyane** H. Adams. 1870. Proc. Zool. Soc. London, pt. 2, p. 376 (type-species, *Cyane blandiana* H. Adams 1870, by monotypy), *non* Felder 1861 (Lepidoptera), *neq* Chambers 1873 (Lepidoptera).
- depressa** Orbigny, *Odontostoma*. 1842. Mollusques [in] Sagra, Histoire Physique, Politique et Naturelle de l'île de Cuba 1: 238, pl. 18, figs. 4-7 (intérieur de l'île de Cuba; restricted to Pan de Guajaibón, Pinar del Río, by Aguayo and Jaume 1947: No. 88; type, BMNH). NOTE: *ptychostoma* Pfeiffer and *rubrocincta* Aguayo and Jaume are synonyms.
- derbyi** Dall, *Proserpina (Staffola)*. 1905. Proc. Biol. Soc. Washington 18: 202 (arroyo of Rio Chico, Paraguassú, Bahia, Brazil; type, USNM).
- Despaenella** H. B. Baker. Neave, 1939. Nomenclator Zoologicus 2: 51, error for *Despoenella*.

- Despoena** Newton. 1891. Systematic List British Oligocene and Eocene Mollusca in the British Museum, p. 255, new name for *Proserpina* Sowerby 1839, *non* Hübner 1816.
- Despoenella** H. B. Baker. 1923. Nautilus 36: 85 (type-species, *Odontostoma depressa* Orbigny, 1842, new name for *Odontostoma* Orbigny, 1842, *non* Turton 1830 etc.).
- ***Dimorphoptychia** Sandberger. 1871. Land.-und Susswasser-Conchylien der Vorwelt, p. 149, pl. 7, figs. 1 a-d (type-species, *Helix arnoudii* Michaud 1837, by monotypy). NOTE: A monotypic helicimid genus in the subfamily Dimorphoptychinae.
- ***discoidea** C. B. Adams, **Proserpina**. 1850. Contributions to Conchology No. 5: 81 (Jamaica; lectotype, MCZ 247-211, selected by Jacobson and Boss 1973: 345, pl. 86, figs. 12-14). NOTE: Not a *Proserpina* but a member of *Proserpinula* Albers, 1860, in the family Sagdidae. See also *opalina* Adams.
- eolina** Duclos, **Caracolla**. 1834. Guerin's Magazine de Zoologie, 3, Cl. 5, pl. 30 (no locality given [Mexico, Kobelt 1879: 203]; holotype, ?).
- globulosa** Orbigny, **Odontostoma**. 1842. Mollusques [in] Sagra, Histoire Physique, Politique et Naturelle de l'Île de Cuba 1: 239, pl. 18, figs. 8-11 (intérieur de l'île de Cuba; holotype, BMNH).
- hannae** Dall, **Proserpinella**. 1926. Proc. California Acad. Sci. ser. 4, 15 (15): 486, pl. 36, figs. 6-8 (type-locality, Maria Madre, Tres Marias Islands, Mexico; holotype, CAS 2211).
- ***hyalina** (C. B. Adams MS) Pfeiffer, **Helix**. 1845. Zeitschrift für Malakozoologie 3: 83, *nomen nudum*, as synonym of *margarita* Pfeiffer.
- linguifera** Jonas, **Helicina**. 1839. Wiegmann's Archiv Naturgesch. 1: 341 (Patriam ignoro; type, ?). NOTE: *allognota* Jonas and *pulehra* C. B. Adams are synonyms.
- Linidiella** Jousseaume. 1889. Mem. Soc. Zool. France 2: 256 (type-species, *Proserpina swifti* Bland 1863, by subsequent designation, Baker 1923: 84).

- ***lyelli** Moore, *Proserpina*. 1867. Proc. Geol. Soc. London 27: 549, pl. 15, figs. 3-4 (Lias; holotype ?). NOTE: probably not a *Proserpina*; possibly a helicoid (Sykes, 1900: 138) or a marine snail.
- marcanoi** Clench, *Proserpina*. 1962. Breviora, No. 173, p. 2, pl. 1, fig. 3 (Colonia Ramfis, 20 km W of San Cristobal, Santo Domingo [Hispaniola]; holotype, MCZ 188911).
- ***margarita** Pfeiffer, *Helix*. 1845. Zeitschrift für Malakozoologie 3: 83 (Jamaica; holotype, ? Cuming Colln. BMNH). NOTE: not a *Proserpina*; synonym of the sagdid *opalina* C. B. Adams.
- nelsoni** Dall, *Ceres*. 1898. Nautilus 12 (3): 27; 1902, Proc. U. S. Nat. Mus. 24 (1264): 501, pl. 28, figs. 1, 3, 5, 8 (Pilitla, San Luis Potosi, Mexico; USNM 107823).
- nitida** Sowerby, *Proserpina*. 1839. Conchological Manual, 1 Ed., p. 124, fig. 274; 1842, 2 Ed., p. 237, fig. 274 (Habitat in insula Jamaica; type, ? BMNH). NOTE: *Proserpina* Pfeiffer and *planulata* C. B. Adams are synonyms.
- Odontostoma** Orbigny. 1848. Mollusques [in] Sagra, Histoire Physique, Politique et Naturelle de l'Île de Cuba 1: 237 (type-species, *Odontostoma depressa* Orbigny, 1842, by subsequent designation H. B. Baker, 1923: 84), *non* Turton 1830 (Moll.), *nec* Agassiz 1846 (Moll.), *nec* Morch 1852 (Moll.).
- Odostoma** Orbigny. Gray, 1856. Proc. Zool. Soc. London, pt. 24, p. 99, error for *Odontostoma*.
- ***opalina** C. B. Adams, *Helix* 1845. Proc. Boston Soc. Nat. Hist. 2: 16 (W part of St. Mary's, Jamaica; lectotype, MCZ 247210, selected by Jacobson and Boss 1973: 395, pl. 78, figs. 11-12). NOTE: First described in *Helix* but later referred to *Proserpina* (Adams, 1851. Contributions to Conchology No. 9: 186). Not a *Proserpina* but a member of *Proserpinula* Albers, 1860, in the family Sagdidae. See also *discoidea* Adams.
- orbignyi** Ancey, *Cyane*. 1892. Le Naturaliste, ser. 2, no. 130, p. 178 (Santa Cruz de la Sierra, Bolivia; holotype, Brussels Mus., *teste* Dance 1966: 278).

- pisum** C. B. Adams, **Proserpina**. 1850. Contributions to Conchology No. 7: 108 (Jamaica; lectotype, MCZ 177263, selected by Jacobson and Boss, 1973: 404, pl. 71, figs. 10-11).
- planulata** C. B. Adams, **Proserpina nitida**. 1850. Contributions to Conchology, No. 9: 174 (Jamaica; lectotype, MCZ 276092 selected by Jacobson and Boss 1973: 405, pl. 85, figs. 3-4). NOTE: Synonym of *nitida* Sowerby.
- Procerpena** Gray. 1847. Proc. Zool. Soc. London, pt. 15, p. 182, cited as misprint for *Proserpina* Sowerby 1839.
- Proserpina** (*sic*) Pfeiffer, **Helix**. 1845. Zeitschrift für Malakozoologie 2: 84 (Jamaica; type, destroyed, *teste* Clench and Jacobson, 1971a: 101). NOTE: synonym of *Proserpina nitida* Sowerby 1839.
- Proserpina** Sowerby. 1839. Conchological Manual, 1st Ed., p. 124, fig. 274 (type-species, *Proserpina nitida* Sowerby 1839, by monotypy); Gray, 1840. Synopsis Contents British Museum, Ed. 42, p. 129, 153, *non Proserpinus* Hübner 1816 (Lepidoptera). NOTE: In the 2nd edition of the Manual (1842: 237) Sowerby credited Gray for having suggested the genus, but Gray first published the name in 1840 (Synopsis of the Contents of the British Museum, pp. 129, 153).
- Proserpinella** Bland. 1865. Ann. Lyc. Nat. Hist. New York 8: 157 (type-species, *Proserpinella berendti* Bland 1865, by monotypy).
- Proserpinella** Pilsbry 1949. Nautilus 63: 43, *non* Bland 1865, error for **Proserpinula** Albers 1860.
- ptychostoma** Pfeiffer, **Helicina**, 1848. Monographia Heliceorum Viventium 1: 12, footnote (Callajabas (*sic*), Cuba [Cayajabos, Pinar del Río]); holotype, destroyed, *teste* Clench and Jacobson (1971a: 101). NOTE: Synonym of *Proserpina depressa* (Orbigny, 1842).
- pulchra** C. B. Adams, **Proserpina**. 1850. Contributions to Conchology No. 5: 81 (Jamaica; lectotype, MCZ 275-999, selected by Jacobson and Boss 1973: 409, pl. 85, figs. 5-6). NOTE: Synonym of *Helicina linguifera* Jonas, 1839.

- rubrocincta** Aguayo and Jaume, **Proserpina depressa**. 1947. Catálogo Moluscos de Cuba, No. 88 (*nomen nudum*): 1957. Mem. Soc. Cubana Hist. Nat. 23: 124 (type-locality, Los Acostas, Luiz Lazo, Pinar del Río; holotype, MP 5520). NOTE: Synonym of *depressa* Orbigny.
- salleana** Gray, **Ceres**. 1856. Proc. Zool. Soc. London, pt. 24, p. 100, 102, 1 fig. (radula) (Cordera, State of Vera Cruz, Mexico in dense woods under dead leaves; holotype, ? BMNH).
- Staffola** Dall. 1905. Proc. Biol. Soc. Washington 18: 202 (type-species, *Proserpina (Staffola) derbyi* Dall 1905, by original designation).
- sulfureus** Thompson, **Linidiella**. 1967. Proc. Biol. Soc. Washington 80: 61, figs. 1-3 (Chiapas, Mexico, 8.2 mi. S Solusuchiapa, 1600 ft. altitude; holotype, UF 19025).
- swifti** Bland, **Proserpina**. 1863. Ann. Lyc. Nat. Hist. New York 8: 13; 1865. *Ibid.*: 155, fig. 1 (the mountains between Porto Cabello and Valencia, Venezuela; holotype, MCZ 188334).
- ***woodwardi** (Edwards MS) Newton, **Despoena**. 1891. Systematic List of British Oligocene and Eocene Mollusca, p. 255 (Headon Hill, Bembridge Beds, Oligocene; *nomen nudum*).

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